



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Description: SAW Filter 915 MHz SMD 1.1X0.9 mm (BW=26MHz)

TST Part No.: TA2294B

Customer Part No.: \_\_\_\_\_

Customer signature required

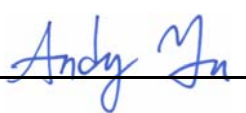
Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Anne Chen 

Approved by: \_\_\_\_\_ Andy Yu 

Date: \_\_\_\_\_ 2021/08/02

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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## SAW Filter 915 MHz

MODEL NO.:TA2294B

REV. NO.:2.0

### A. MAXIMUM RATING:

1. Input Power Level: 20 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 3 (MSL 3)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

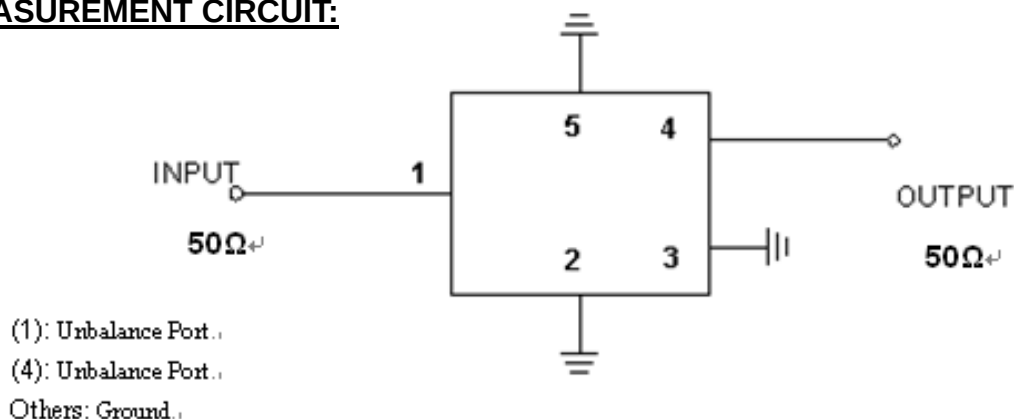
### B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single ended) :  $Z_s = 50 \Omega$

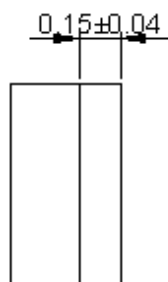
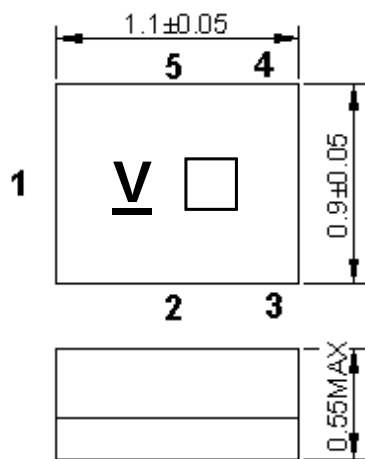
Terminating load impedance (single ended) :  $Z_L = 50 \Omega$

| Item                                           | Unit   | Min. | Typ. | Max. | Note |
|------------------------------------------------|--------|------|------|------|------|
| Center Frequency <b>Fc</b>                     | MHz    | -    | 915  | -    | -    |
| Insertion Loss (902 ~ 928 MHz)                 | dB     | -    | 3.1  | 3.6  | -    |
| Amplitude ripple (902 ~ 928 MHz)               | dB     | -    | 0.7  | 2.0  | -    |
| VSWR (902 ~ 928 MHz)                           |        | -    | 2.0  | 2.6  | -    |
| <b>Attenuation</b> (reference level from 0 dB) |        |      |      |      |      |
| 10 ~ 820 MHz                                   | dB     | 33   | 54   | -    | -    |
| 820 ~ 884 MHz                                  | dB     | 26   | 45   | -    | -    |
| 950 ~ 960 MHz                                  | dB     | 15   | 27   | -    | -    |
| 1760 ~ 1830 MHz                                | dB     | 40   | 49   | -    | -    |
| 2640 ~ 2745 MHz                                | dB     | 30   | 41   |      |      |
| Temperature Coefficient of Frequency           | ppm/°C | -    | -36  | -    | -    |

### C. MEASUREMENT CIRCUIT:



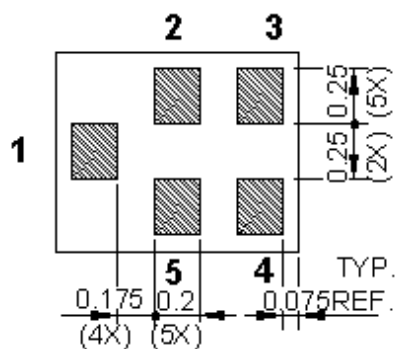
## D. OUTLINE DRAWING:



All tolerances are  $\pm 0.05$  mm unless otherwise specified  
Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm



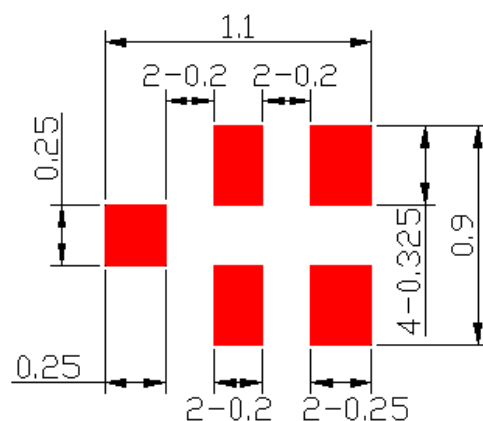
| Pin No. | Symbol | Function |
|---------|--------|----------|
| 1       | IN     | Input    |
| 2       | GND    | Ground   |
| 3       | GND    | Ground   |
| 4       | OUT    | Output   |
| 5       | GND    | Ground   |

**V** : Series Number

**□** : Year/Month Code .Follow the table. (8-year cycle)

| YEAR/Month | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2021       | A        | B        | C        | D        | E        | F        | G        | H        | J        | K        | L        | M        |
| 2022       | N        | P        | Q        | R        | S        | T        | U        | V        | W        | X        | Y        | Z        |
| 2023       | a        | b        | c        | d        | e        | f        | g        | h        | j        | k        | l        | m        |
| 22024      | n        | p        | q        | r        | s        | t        | u        | v        | w        | x        | y        | z        |
| 2025       | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> | <u>E</u> | <u>F</u> | <u>G</u> | <u>H</u> | <u>J</u> | <u>K</u> | <u>L</u> | <u>M</u> |
| 2026       | <u>N</u> | <u>P</u> | <u>Q</u> | <u>R</u> | <u>S</u> | <u>T</u> | <u>U</u> | <u>V</u> | <u>W</u> | <u>X</u> | <u>Y</u> | <u>Z</u> |
| 2027       | <u>a</u> | <u>b</u> | <u>c</u> | <u>d</u> | <u>e</u> | <u>f</u> | <u>g</u> | <u>h</u> | <u>j</u> | <u>k</u> | <u>l</u> | <u>m</u> |
| 2028       | <u>n</u> | <u>p</u> | <u>q</u> | <u>r</u> | <u>s</u> | <u>t</u> | <u>u</u> | <u>v</u> | <u>w</u> | <u>x</u> | <u>y</u> | <u>z</u> |

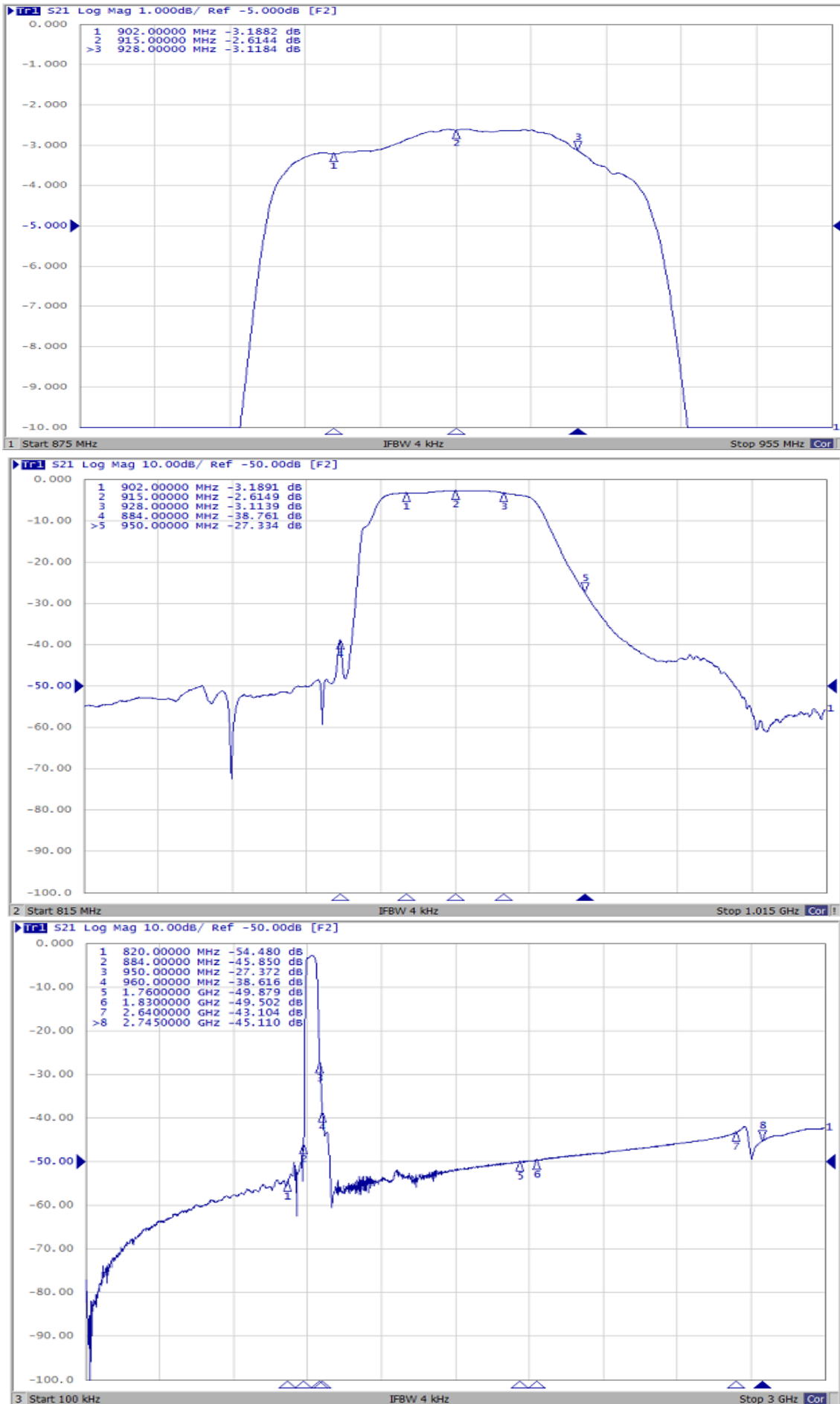
## E. PCB Footprint:



**■** : Land Pattern

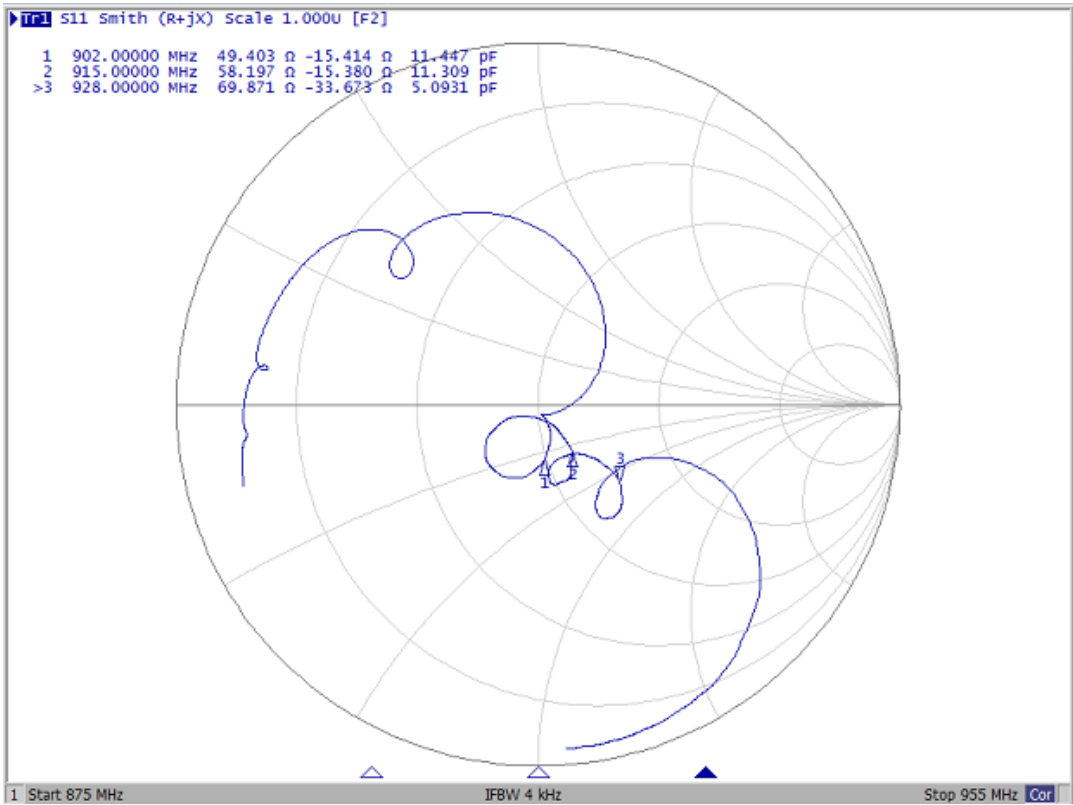
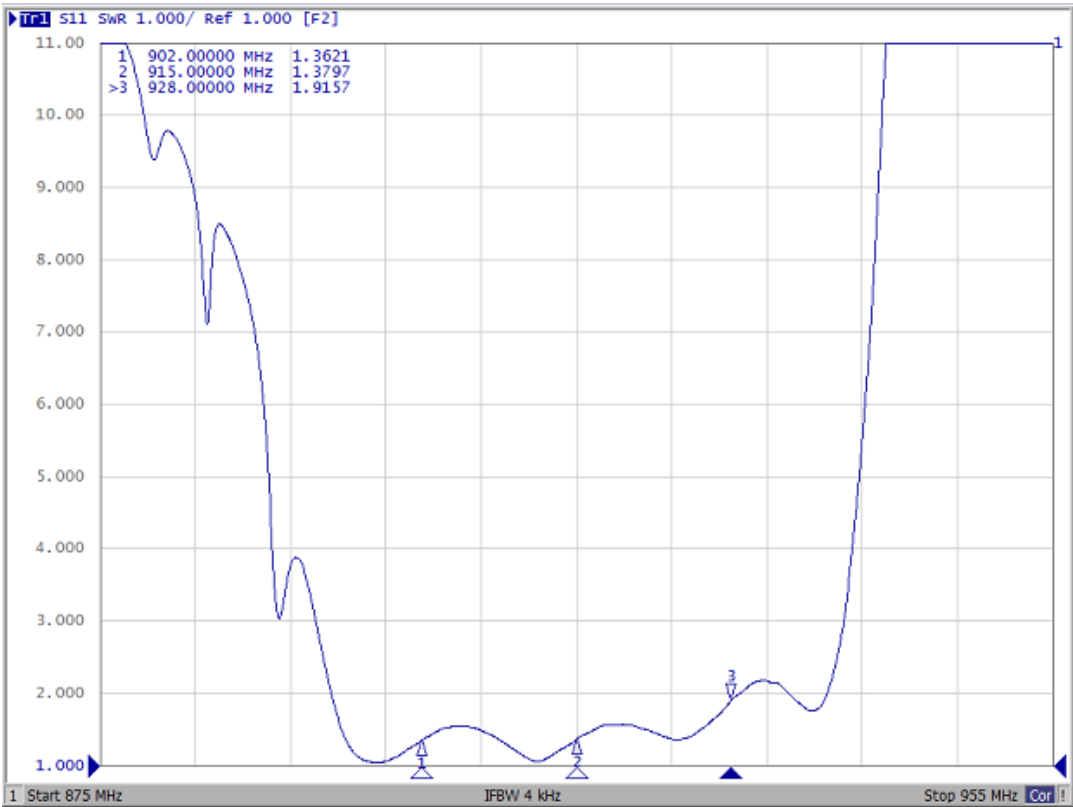
Unit: mm

## F. Frequency Characteristics :

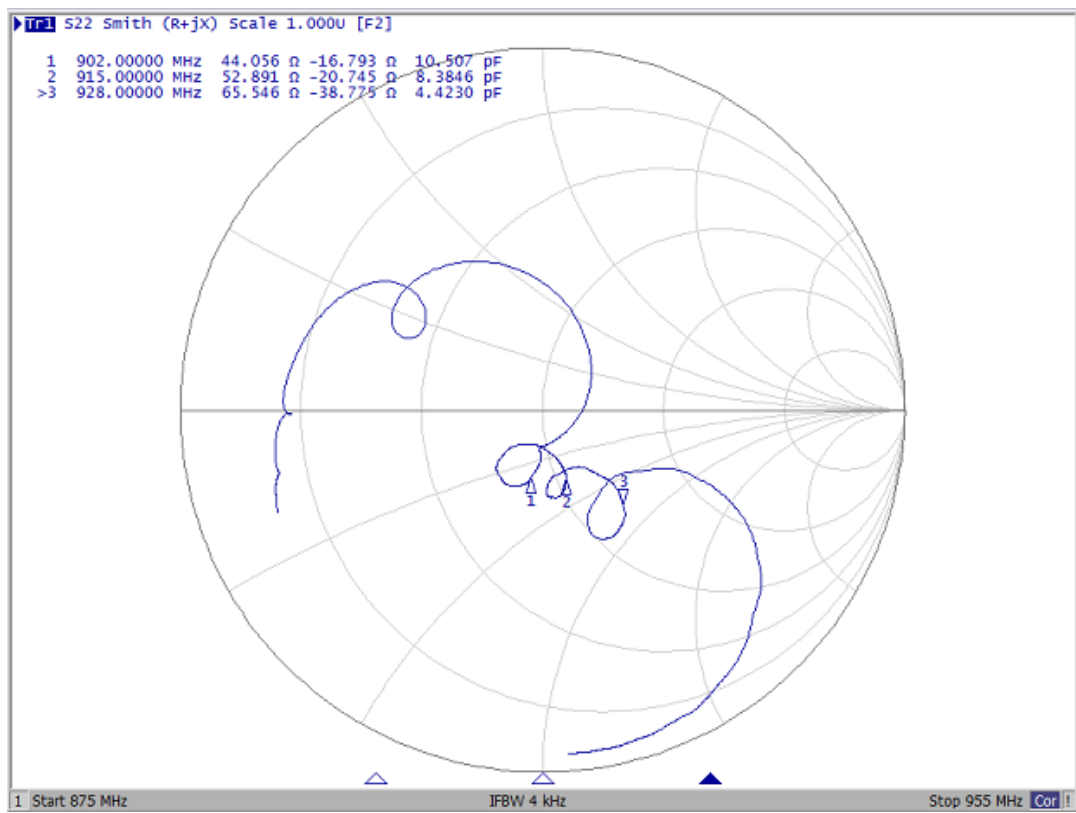
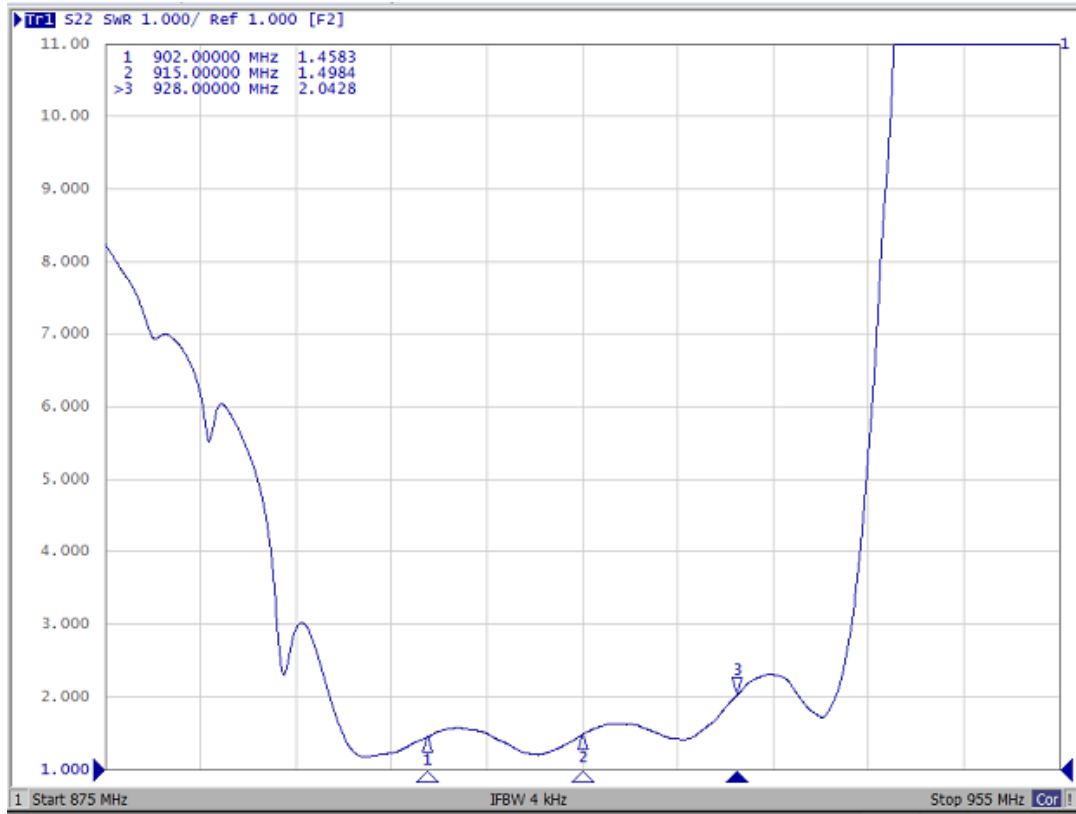


Reflection Functions :

S11



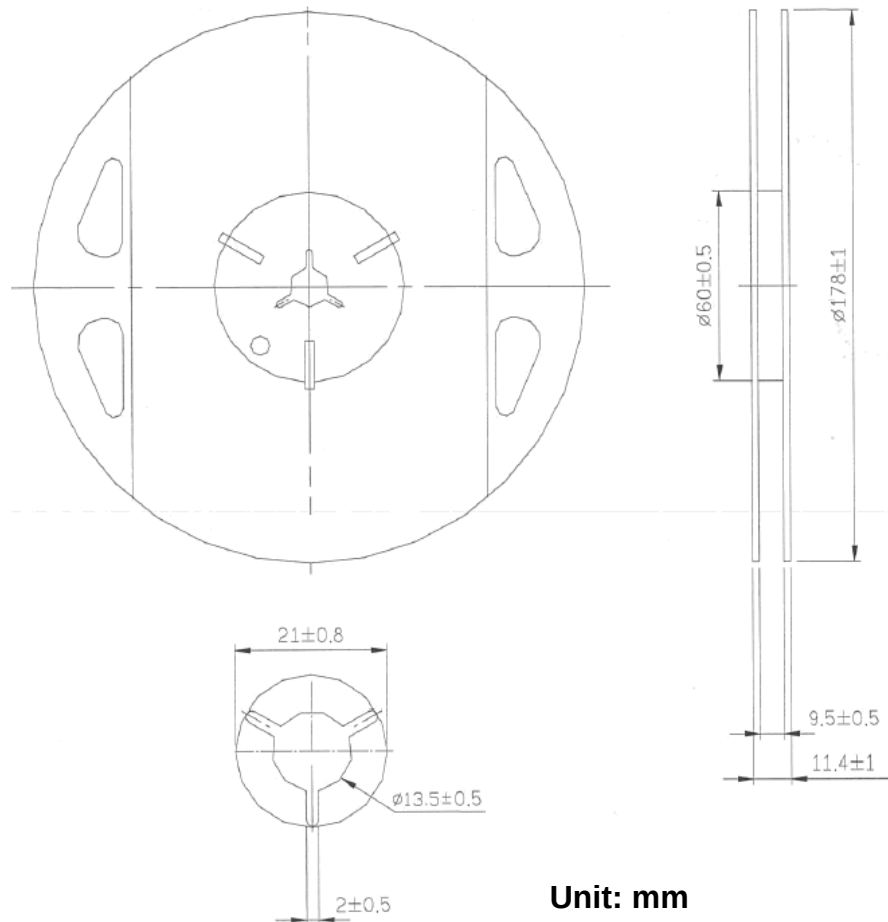
## S22



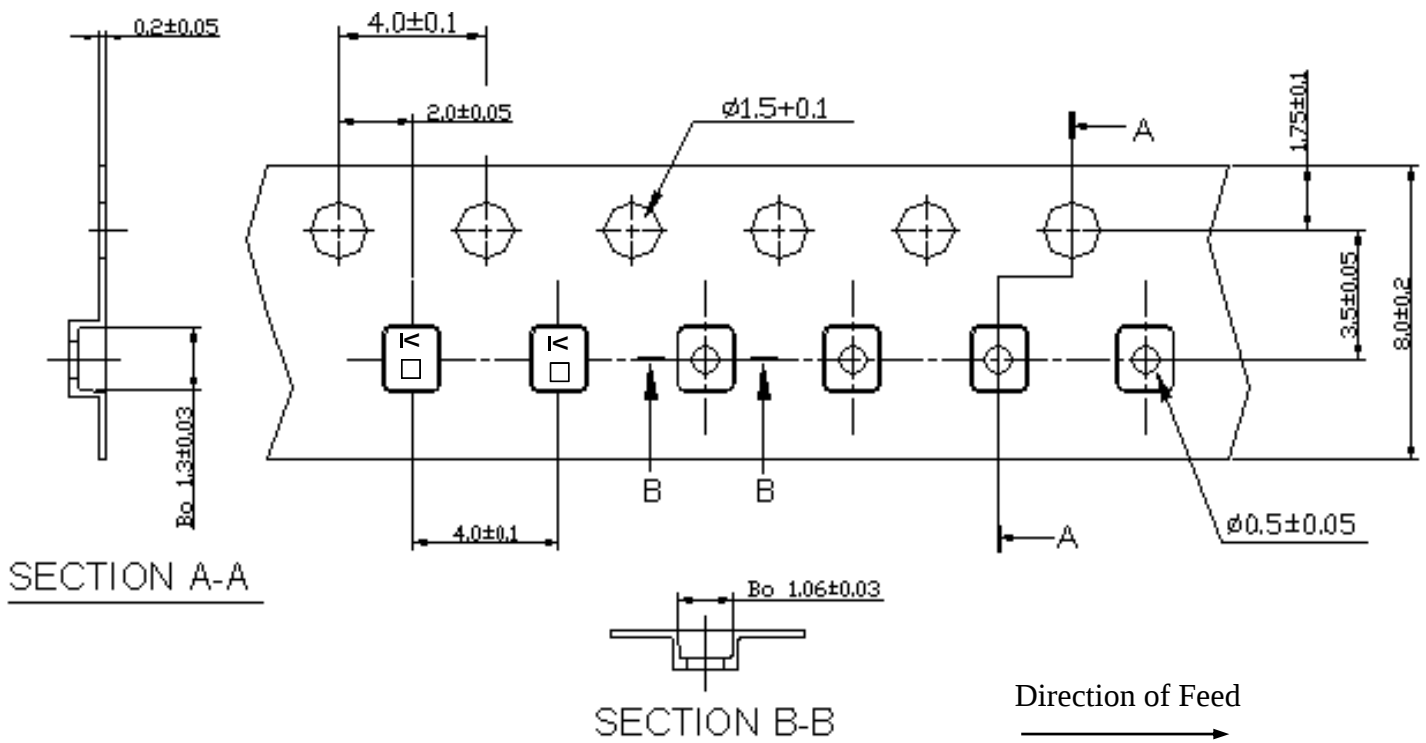
## G. PACKING:

### 1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



### 2. TAPE DIMENSION



#### H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 245~260°C peak (min. 10sec).
4. Time: 2 times.

